
XII. SOME FEATURES OF TOBACCO HISTORY.

BY GEORGE K. HOLMES,
*Bureau of Agricultural Economics,
United States Department of Agriculture.*

SOME FEATURES OF TOBACCO HISTORY.

By **GEORGE K. HOLMES.**

The purpose of this paper is not to give a history of tobacco, for that would be impossible within a short time limit, but the purpose is partly to correct some popular misunderstandings, partly to supply some interesting features not generally known, and partly to indicate very briefly some lines of an historical narrative.

USED BY INDIANS.

At the time of the discovery of America, the custom of smoking tobacco, of chewing it, and of snuff taking—that is, of using it in some way—was diffused over the greater part of this vast continent between the southern part of South America and the boreal regions of North America. The Indians of the West Indies and of South America smoked cigars and cigarettes and took snuff, except in the district of La Plata, Uruguay and Paraguay, where no form of tobacco was used until the Spaniards introduced it. From the Isthmus of Panama and the West Indies to southern Canada and to California, smoking was practiced by the Indians, and circumstances show that this was of ancient origin.

Why did the Indians use tobacco? It will not do to interpret a custom of another people and of ancient times in terms of ourselves and of our own times. It is a false picture to think of the Indian as smoking his after-dinner pipe, or cigar, or cigarette, or as biting off a chew of navy plug as he paused in the cultivation of his corn. The tobacco plant was indigenous to America and the Indian must have used it before he raised it in his garden, and this he was doing when the white people first saw him.

The primary service of tobacco to the Indians was of a religious nature. Before the Spaniards came it was not used as a habit nor for the sake of sociability. Rather, it was related to the unseen world. To the Indians of what is now the United States, the tobacco plant had a sacred character; it was almost invariably used on solemn occasions, accompanied by suitable invocations to dreaded spirits. It was ceremonially used to aid in disease or distress, to ward off danger, to bring good fortune, generally to assist one in need, and to allay fear.

The planting of medicine tobacco was one of the oldest ceremonies of the Crows, consisting, among other observances, of a solemn march, a foot race among the young men, the planting of seed, the building of a hedge of green branches around the seed bed, a visit to the sweat house, followed by a bath and a solemn smoke, all ending with a feast.

In Virginia, tobacco was believed to be a special gift from the realm of the departed. The leaves were arranged in a circle, from the center of which adoration was offered to the sun, accompanied by eccentric gestures and contortions of the body, by dancing, stampings, and uplifting of the hands and by fixed starings toward the sky. The object was to propitiate an evil intelligence. When crushed into powder, tobacco was sowed to the wind when a drought prevailed or when a tempest was blowing on the water; or it was sprinkled over the weirs when fishes began their annual migration from the sea. It was tossed into the air, as an offering of reward to a spirit, after an escape from some unusual danger, or when the warriors returned to town after a successful war, or hunting expedition, or long journey in which they had been exposed to many perils and hardships.

DISSEMINATION BY SPANIARDS.

Medicine was related to religion in the affairs of primitive man. It was observed by the Spaniards who early came to the West Indies and to the mainland of America that tobacco was used by the Indians for medicinal purposes and to prevent a feeling of fatigue. Historically this is a matter of subsequent great importance, because it was the cause of the rapid spread of the cultivation and use of tobacco throughout the world. Tobacco was first observed by Europeans, within present knowledge, in 1492 in the West Indies. The subsequent sequence of events in the introduction of tobacco to Europe is uncertain and the record is contradictory. It is said that the Spaniards began the cultivation of tobacco in the West Indies before 1535 and shortly after made the tobacco of the Island of Trinidad famous in Europe. Soon they developed production on a large scale in the West Indies, Venezuela, and Brazil.

My assumption is that tobacco was going from Spanish plantations to Spain and Portugal for use there before a few noted men got themselves into the historical record as introducers of the plant. One item of record is that a famous physician, Francisco Fernandes, who was sent to Mexico by Philip II of Spain in 1558, was the first to bring the plant to notice in Europe with the specimens that he took. In 1560, Jean Nicot, French ambassador to Lisbon, found tobacco seed

there, which he sent to Paris. The popular belief is that Sir Walter Raleigh was the man who first took tobacco to England, but the writers of history have no good excuse for making this error. Apparently Sir John Hawkins was the first to take tobacco to England, in 1565, and it is of record that tobacco was growing in that country about 1570. Yet one of our historical authorities states that in 1586 tobacco and pipes were first brought to England by Sir Francis Drake. Evidently there is a great deal of error in tobacco history as it is written.

It is well to bear in mind that social history is made mostly by the masses of the people and little by historical figureheads; and I would suggest that the conflicting statements concerning the first transfer of tobacco to Europe be ignored and that the responsibility for this be placed on the Spanish sailors and sea captains who early came to the West Indies and whose names are unsung by history. The fact that Spaniards were cultivating tobacco in the West Indies before 1535, and apparently on a commercial scale soon after, indicates that they were finding a market for it in Spain about that time.

FIRST USED BY WHITES AS A MEDICINE.

There is much in this subject of tobacco that pertains to psychology. Why did Europeans begin to use tobacco? Certainly not because they believed that it put them favorably in touch with the spirits of evil. The misery of the first sickness in acquiring the use of tobacco by smoking—and this was the first use in Europe—would seem to have been a formidable obstacle to taking the first step.

From the beginning in the sixteenth century, or perhaps at the end of the fifteenth century, and for an indefinite and variable later time, tobacco was smoked by Europeans mainly because of the wonderful properties attributed to the smoke. It was supposed, and the belief was derived from the Indians, that the smoke not only cured disease but was a prophylactic as well. Moreover, it prevented the pangs of hunger and fatigue. The visitation of the plague encouraged the use of tobacco enormously. It was for a long time prescribed as a medicine by physicians in Spain, France, and England.

There is or has been until recently a last remnant of the belief in the curative power of tobacco in the United States. I have seen a countryman take a chew of tobacco from his mouth and apply it to a wound with the expectation that the healing would be hastened.

In the meantime tobacco was going to other countries. It was introduced into Turkey at the beginning of the seventeenth century, and the Persians soon received it from Turkey. It reached far-off China still earlier, before the end of the sixteenth century.

PIPE SMOKING IN ENGLAND.

During the first 50 years after tobacco began to be used in England, smoking spread with extraordinary rapidity to all classes of society—peers, squires, parsons, and peasants. Soon, smoking entered another phase of its history. It began to withdraw from the domain of medicine and to become fashionable. Sir Walter Raleigh's true place in tobacco history is that he was responsible for its common use in smoking for pleasure. Long before his death in 1618, smoking had become fashionable.

A social pipe, the same pipe, was passed from person to person around the dinner table. There was smoking at the theater. In 1620, the London Society of Tobacco Pipe Makers was incorporated, with the motto, "Let brotherly love continue." Much was written in favor of tobacco. Marston wrote in 1607,

Musicke, tobacco, sacke, and sleepe
The tide of sorrow backward keep.

Edmund Spenser, in the *Faerie Queen*, calls tobacco, "The sovaine weede, divine tobacco."

A French traveler who was in London in 1633 wrote that the English were naturally lazy and spent half their time in smoking. The habit was not confined to London, but had extended to the country and into Scotland. Smoking was a particular feature of the Lord Mayor's show in London in 1672. Then, as before, pipes and tobacco were a usual provision for city feasts.

That immortal smoker, Raleigh, had many distinguished followers. John Milton was a smoker, even after he was blind. I have heard smokers say that they do not like to smoke in the dark—they want to see the smoke. At any rate, Milton smoked after he became blind. Sir Isaac Newton smoked immoderately. Thomas Hobbes and Isaac Walton were smokers, and each lived to be 90 years old.

But tobacco had many enemies. Besides King James I, who wrote the *Counterblaste to Tobbacco*, there was Dekkar, the dramatist, who refers to tobacco as "thou beggarly monarch of Indians, and setter-up of rotten-lunged chimney sweepers." Burton, of the *Anatomy of Melancholy*, believed in tobacco as a medicine, but denounced the common smoking "by most men, which take it as tinkers do ale," as "a plague, a mischief, a violent purger of goods, lands, health—hellish, devilish, and damned tobacco, the ruin and overthrow of body and soul."

In the latter decades of the sixteenth century smoking became less fashionable and general. Yet, in Queen Anne's time smoking was still common although decadent. Then followed a long period when smoking was under the social ban in England. In the eighteenth

century it was confined largely to the middle and humbler classes, to use an English expression; but there were numerous exceptions. Country parsons smoked, and their parishioners, from squire to laborer.

SNUFFING FOLLOWS.

Looking backward from the present time, it would seem as though smoking had a most improbable and absurd successor in fashionable London and later in England. Who could guess, without knowing the historical fact, that it was tobacco snuff? The original users of snuff were the Indians of South America and of the countries northward to Mexico. From them Spaniards acquired the habit and in consequence became the first snuff makers of Europe. The Dutch, English, and Scotch extended the industry, as they in turn became users of snuff.

It is said that by 1759 snuff taking had apparently occupied the place of pipe smoking in the fashion of London. In a satirical poem of the time, one of the verses asserts that—

Coxcombs prefer the tickling sting of snuff.

The populace, however, was still on the side of smoking. Dr. Johnson said in 1773:

To be sure, it is a shocking thing, blowing smoke out of our mouths into other people's mouths, eyes, and noses, and having the same thing done to us; yet, I can not account why a thing which requires so little exertion and yet preserves the mind from total vacuity, should have gone out.

Dr. Johnson and all his company took snuff, as every one did in the fashionable world, and a great many outside of the charmed circle, although on the outside pipes were still in full blast.

In the first two or three decades of the nineteenth century, smoking reached its nadir in England. The snuffbox was all powerful. The Prince Regent was devoted to snuff and had "a cellar of snuff" which after his death in 1830 was sold for 400 pounds. The oldest method of taking snuff in England was to scrape it with a rasp from a root of the tobacco plant; the powder was placed on the back of the hand and snuffed up into the nose. This is why a coarse kind of snuff made from the darker and ranker tobacco leaves has been called *rappée*, a corrupted spelling and pronunciation of a French word meaning rasped. The rasp was carried in a waistcoat pocket and soon became a luxurious implement of carved ivory, bejeweled and ornamented.

But the habit of using snuff reached its peak in Great Britain and then followed a long period of decline, ending in desuetude by the end of the nineteenth century, when the snuffbox disappeared from the mantlepiece of the clubs.

VOGUE OF THE CIGAR.

Next enters the vogue of the cigar in England. The Spaniards first saw Indians smoking cigars in the West Indies and in turn became smokers and makers of cigars themselves. Cigars and cigar making were introduced into Spain and by one channel and another a few cigars reached England from time to time. But until the early years of the nineteenth century, cigars were almost unknown in England. By 1830, they were freely, if privately, smoked. Why this new custom?

Bear in mind that pipe smoking had by no means become extinct in Great Britain, but it was mostly confined to what English writers like to call the humbler classes, with some survival in classes above. That country sent many soldiers to the Peninsular War in Spain and Portugal, and many came back, and when they returned they brought with them cigars and the habit of smoking them. Then followed the acquiring of the habit of cigar smoking by those classes that had early been pipe smokers and later snuff takers.

Cigar smoking grew rapidly in England. Sir Walter Scott smoked cigars and so did Byron. Byron's poem, *The Island*, is known to-day only because it contains his apostrophe to tobacco. Thackeray was another cigar smoker. Others, however, detested cigar smoking. The Duke of Wellington was annoyed by the increase of cigar smoking among the officers of the army, and in the early forties he issued a general order against smoking in mess rooms and against smoking by officers of junior rank. Queen Victoria and the Prince Consort detested tobacco and it was taboo wherever court was.

Since the Peninsular War, the pipe and the cigar have gone hand in hand in Great Britain, with a tendency in later years of the pipe to return to its respectability; and in the more recent years the cigarette has become very prominent. You will remember that Tennyson was a pipe smoker of strenuous performance and that he was a guest at Shadwell Rectory when he wrote *In Memoriam*. When he began its composition, his pipe created such a smudge in the rectory that he was removed by his host, very politely, of course, to a workshop in the garden, and that was the birthplace of this immortal poem, on account of the poet's pipe.

IN THE THIRTEEN COLONIES.

So far, I have purposely remained out of the Thirteen Colonies, partly because there is a deal of important tobacco history before the first tobacco export from Jamestown, partly because English history throws necessary light on the early tobacco production and the tobacco habits of this country; and partly also to avoid the appear-

ance of making Jamestown the creator of the smoking habit in England. That is an impression that one gets from a little reading of colonial history.

Our national tobacco history begins at the Jamestown settlement. The Virginia plant rarely exceeded a yard in height. It had a small yellow flower, like that of henbane, and had short, thick leaves, weak in flavor but biting to the tongue. The West Indian plant was 9 to 12 feet high. The Jamestown settlers followed the Indian custom of planting tobacco seed as they did corn, and did not transplant from a seed bed. Later the practice of transplanting was suggested by the old English practice with regard to vegetables. The Indians removed suckers to give the leaves greater size, and pulled the leaves from the standing stalks and dried them by fire or sun. For 150 years the colonists dried the leaves by hanging them in barns exposed to the free circulation of air. The Indians ceased to plant tobacco as soon as their white neighbors began to cultivate it on an extensive scale, and obtained their tobacco from the whites by exchange.

John Rolfe raised the first tobacco at Jamestown in 1612, and by 1618 the export of tobacco to England amounted to 20,000 pounds in that year. Rolfe's object was to obtain goods from England in exchange for tobacco. Already some sassafras had been exported. Tobacco at once became the chief export because it returned more for the labor required for its production than anything else. England was urging the raising of wheat for export, but this was uneconomical for the colonists as compared with tobacco.

It has been asserted by critical writers that, without export tobacco, the first settlement of Virginia would have been a failure. This seems to me to be an exaggeration by those who have looked at the subject through a pinhole. Certainly the Jamestown people did not eat tobacco, although I have seen tobacco chewers who seemed to be eating it, and, since other colonies survived without early tobacco exports or other exports that had any such prominence as tobacco did in Virginia, it is not logical to suppose that Jamestown would have been abandoned in want of tobacco. If the statement had been made that the corn of the Indians saved the colonists from starvation and made the colony permanent it would have been nearer the mark. Tobacco exports were exchanged mostly for textiles, clothing, and metal and leather goods. So readily were these obtained by raising tobacco that it is reported that Jamestown was more than once near starvation because tobacco was raised too much to the exclusion of foods.

It is not my intention to repeat the familiar story of the service of tobacco as money in early Virginia, but I venture to offer a few

words of comment. Our school histories and, indeed, our larger histories are likely to create the impression that there was some inherent and exclusive virtue in tobacco that qualified it to perform duty as money. This, of course, is thoroughly erroneous. Tobacco, in the trade between Virginia and England, was readily exchangeable in England for any and all of the things that the colonists bought; hence to them it had one of the attributes of money, or exchangeability, but it did not possess the other attributes of money. The fact of ready exchangeability, joined to the fact of export, created a situation for tobacco in Virginia in which it could serve as money in a limited way. At a time when real money was scarce a clergyman or a laborer willingly took his pay in tobacco, because he knew that he could take it to the nearest merchant and receive from him goods or credit in exchange; for the merchant knew that he could send the tobacco to England by the next ship and receive therefor its equivalent in goods. There have been numerous other instances throughout the ages, and in other parts of the world, of limited money service by commodities. Among them are cattle, wheat, corn, rye, tea, furs, rice in Carolina, sugar in the West Indies, and dried codfish in Newfoundland.

BEGINNINGS IN THE STATES.

The culture of tobacco in New England began at the time of the various settlements, but was opposed by many of the Puritians, so that the crop did not develop to any great extent for many years. As early as 1640, the Connecticut colony made a law restricting the use of tobacco to that grown in the colony, with penalty of 5 shillings for every pound of money expended for imported tobacco unless license had been obtained from a court. This was to stimulate home production, and yet in 1646-47 a law was enacted forbidding every person under 20 years old and every other person who had not become a tobacco user, to use any tobacco without certificate from a physician that it would be beneficial to him. Nor should tobacco be used publicly in the streets, with penalty of 6 pence. Somewhat similar prohibitions existed, or had existed, locally in England, so that this was not legislation that was the first of its kind. Massachusetts Bay had similar restrictive legislation. There was a diversity of opinion in New England with regard to tobacco. John Eliot, the preacher and missionary among the Indians, denounced tobacco, but the pastor of the first church of Charlestown "was always seen with a pipe in his mouth."

So important had tobacco become to the Connecticut colony by 1753, that an official inspection was established for export tobacco for securing sound, well-ripened, and well-cured tobacco. The export

tobacco was for cigars and until 1800 was bought by local merchants and shipped mostly to the West Indies.

Statements may be found with regard to the first year when tobacco was raised by the whites in some of the States, but such statements are to be accepted with caution. It may be supposed that the first settlers lost no time in cultivating this plant.

In Maryland, it is supposed that the first white man to raise tobacco was a Virginian who migrated to Kent Island in the eastern edge of the Chesapeake Bay opposite Baltimore in 1631. Penn's colonists early engaged in tobacco raising; as early as 1689, or only seven years after the Proprietor came from England, 14 cargoes of tobacco were exported by them to that country. Tobacco was raised by the first French or Spanish settlers of Illinois, Missouri, and Louisiana, and by the first settlers of Tennessee. In Missouri, it did not become a staple crop until 1822 or 1823. Having been introduced into Louisiana by the Western Co., a considerable quantity of tobacco was produced by 1718. In 1752, its culture was encouraged by the French royal governor, who took the whole crop at 7 cents a pound, and the Spanish colonial government gave the same sort of encouragement in 1776.

The earliest information for Kentucky is that in 1785 General Wilkinson, of Lexington, contracted with the Spanish governor in Louisiana to deliver several boatloads of tobacco in New Orleans. Probably some of this tobacco was grown on the Ohio River and in Kentucky as well as in Spanish settlements on the Mississippi River.

By 1810, tobacco had become a great staple crop in Tennessee. Florida's beginning, it is said, was not until 1829. It is incredible that tobacco was not raised in New York until 1845 in Onondaga County near Rochester, and yet that is the assertion of the historians. It is pertinent to inquire what the Dutch settlers in the Hudson and Mohawk Valleys were doing for more than 200 years before 1845. We don't need to depend on that learned historian, Knickerbocker, for tales of the Dutchmen's devotion to their pipes.

THE WORLD'S TOBACCO.

This amazing plant, the use of which has penetrated every part of the world, has also become diffused throughout the world as a crop. The pioneer and first settler raised tobacco with his first food crops. While it is not possible to ascertain how much tobacco is produced in the entire world, it is possible to do so for many countries and thus account for most of the world's production. For countries for which estimates were available, the total of 1900 was 2,201,000,000 pounds. The world crop touched 2,834,000,000 pounds

in 1910 and fell to 2,254,000,000 pounds in 1914 and 2,153,000,000 pounds in 1915. About one-half of the world's tobacco crop, as nearly as can be ascertained, was produced by the United States in 1915. The fraction previous to 1909 was hardly one-third back to 1900, before which year the world's crop has not been compiled. By 1915 the United States and its possessions produced more than one-half of the world's crop of tobacco, and in 1914 and 1913 about an even one-half.

While tobacco production is found in many countries, only a few of them produce a surplus, above their own consumption, of sufficient proportions to be noticeable. The average yearly exports of tobacco in the world's trade grew from 755,000,000 pounds in 1904-1908 to 924,000,000 pounds in 1909-1913, of which latter quantity the share of the United States was over 41 per cent. In the latter period, the Sumatra leaf of the Dutch East Indies supplied 18 per cent of the world's tobacco exports; 6.5 per cent went from Brazil, 5 per cent from Turkey, 4 per cent from Cuba, 3 per cent each from British India and the Philippine Islands, and 2.5 per cent each from Algeria, Russia, and Santo Domingo.

While tobacco has been moving out of the countries as a surplus of production, it has not only been entering countries having a deficient production, but also countries having a surplus, as an exchange of one variety for another. Before disturbance of the world's trade by the war, the world's tobacco imports, which were mostly ascertainable, increased from the yearly average of 717,000,000 pounds in 1904-1908 to 844,000,000 pounds in 1909-1913. Germany was the chief tobacco importer among the nations, and received 22 per cent of the world's total in the former period and 20 per cent in the latter. The United Kingdom received 12 and 14 per cent, respectively, in the two periods; France, 9 and 8 per cent; and other countries each less than 8 per cent.

PROGRESS IN THE UNITED STATES.

Tobacco's insignificant beginning in John Rolfe's garden in 1612 has had magnificent results in this country. You will remember that by 1618, 20,000 pounds were sent to England. The export of tobacco from Virginia doubled the next year, and in three years from 1618 it trebled. A half million pounds measured the export in 1627, about 1,500,000 pounds in 1639, about 23,750,000 pounds in 1664—presumably from Maryland as well as Virginia—and with an irregular upward movement the quantity exceeded 107,000,000 pounds in 1770. Exports were small, but did not cease, during the Revolution, after which they rapidly rose to 101,000,000 pounds in 1790 when the estimated production was 130,000,000 pounds.

The first United States census of agriculture, for 1839, found a crop of more than 219,000,000 pounds of tobacco, but in 1849 it was under 200,000,000 pounds. By 1859 it had more than doubled the crop of 1849 and reached 434,000,000 pounds, followed by reduction to 263,000,000 pounds in 1869 in consequence of the Civil War. After that year, production advanced to 868,000,000 pounds in 1899, to 1,056,000,000 pounds in 1909, and to 1,508,000,000 pounds in 1920, the largest crop ever raised in this or any other country.

Virginia led in tobacco production in 1839, with 34 per cent, or more than one-third of the national total. The Civil War placed Kentucky in the lead, and by 1869 that State produced 40 per cent of the whole crop. This lead has been held to the present time, with an average of about 35 per cent. By 1899 Virginia had fallen behind North Carolina also, when the latter State produced 15 per cent of the total crop, but North Carolina did not continuously hold second place until recent years.

Tobacco production per capita apparently declined from 11.1 pounds in the period 1839-1844 to 7.4 pounds in the decade following the Civil War. The information is not as dependable as is desired, but at least the indication was a declining ratio of production to population. The tendency of the ratio was reversed after 1865-1874, and by 1895-1904 the ratio was 9.3 pounds, followed by 10 pounds in 1905-1914. The yearly ratios of 1915-1920 ranged from 10.6 to 14.1 pounds.

Tobacco is rated as a crop of considerable importance from a national point of view, and of high importance within the limits of some of the States, and yet the area occupied by it is a very insignificant fraction of farm and of crop area. The census for 1909 found 1,294,911 acres devoted to tobacco, and this area was only 0.41 per cent of the total crop area, and 0.15 per cent of the farm area.

Fundamental to agriculture is the yield per acre. In the case of tobacco, 10-year averages have been adopted, when possible, to smooth out yearly variations. During 1865-1874, the national average yield per acre was 722.3 pounds, and it fell to 719.9 pounds in the following 10 years, and to 714.4 pounds in 1885-1894. Thereafter the gain has been marked, and the average of 768.8 pounds during 1895-1904 was followed by 827.5 pounds during 1905-1914. During 1915-1920 the yearly yield per acre ranged from 730.8 to 873.7 pounds.

The average yield of tobacco per acre per 1,000,000 of the population was 18.5 pounds in the decade 1865-1874; it fell to 14.4 pounds in the next decade, to 11.5 pounds in 1885-1894, to 10.1 pounds in 1895-1904, and to 9.1 pounds in 1905-1914, and the yearly averages for 1915-1920 range from 6.9 to 8.3 pounds. The inference is plain

that the yield of the soil in tobacco has declined for half a century in its ratio to population.

In pre-war years, the United Kingdom received more than one-third of the tobacco exported from this country, and about one-tenth went each to France, Germany, and Italy. Over 6 per cent went to the Netherlands, 5 per cent to Spain, 4 per cent each to Australia and Canada, 3 per cent to Belgium, and 2 per cent to China. Of course, the war very much disturbed these percentages.

The exported fraction of the crop has been a diminishing one. For 1790 the fraction was 78 per cent; for 1845-1854, 67.2 per cent; for 1875-1884, 53.9 per cent, from which the decline was steady to 40.6 per cent in 1905-1914. The percentage was 43 for 1915, 38.1 for 1916, 26 for 1917, 47.5 for 1918, and 49 per cent for 1919, no allowance being made for the carry over.

Tobacco varies greatly in its characteristics as they appear to smokers; and fancy, perhaps created by habit, gives preference to one or another of the many varieties and subvarieties of the plant produced throughout the world. For this reason the United States, the greatest tobacco producing and greatest tobacco exporting country in the world, also imported tobacco enough to make it the fifth in order among the tobacco-importing countries of the world before the World War.

The fragrant leaf of Cuba is by far the chief tobacco imported into the United States. Before the recent war it was 45 per cent of the total leaf-tobacco imports, but the fraction greatly declined during the war and in the year beginning with July, 1917, it was only 19 per cent, and in 1919, 25 per cent. In pre-war times, 12 per cent of this country's tobacco imports came from Turkey in Asia and 10 per cent from Turkey in Europe, or 22 per cent from that Empire. The war extinguished the direct trade movement, but apparently tobacco imports from Greece, which were normally little more than 1 per cent, took up this movement, with the result that tobacco imports from that country grew to 17 per cent of the total in 1917. Next in order below was Sumatra's thin leaf, with 11 per cent of the total tobacco imports into the United States before the war.

By the 10-year periods, tobacco imports were equal to 2.2 per cent of the crop of this country in 1865-1874, followed by irregular increase to 3.2 per cent in 1895-1904 and to 4.9 per cent in 1905-1914.

It has already been made apparent that the United States has always been a surplus country as a net result of the inward and outward movements of tobacco in foreign trade. From the small beginning at Jamestown, the national tobacco surplus grew to be 36,000,000 pounds in 100 years, 80,000,000 pounds in 200 years, and 326,000,000 pounds in 300 years, or, rather, in the normal years before the World War. Most of this tobacco has been unmanufactured when exported. The

national net surplus of tobacco, as a fraction of the production, persistently declined from the Civil War to the present time; the decline being from 74 per cent of the crop in 1865-1874 to 34 per cent for the five years 1915-1919.

The computed per capita consumption of tobacco in this country has been steadily gaining since 1865-1874. Before that time, back to 1839, it seems to have been about 3.3 pounds. Following the Civil War, the computed average is as low as 2 pounds, and this was followed by a climbing movement that reached 6.4 pounds in 1905-1914 and 8 pounds during the following four years—8 pounds for every man, woman, child, and baby.

Relationships exist among several per capita ratios. Tobacco production per capita is increasing because tobacco acreage is increasing faster than population. Production per acre per capita is decreasing; fertility improvement is not keeping up with human multiplication and immigration. The excess of the tobacco exports per capita is declining. The result of all these movements is an increasing per capita consumption of domestic tobacco that is absorbing a larger and larger fraction of the per capita production.

USES IN THE UNITED STATES.

Pipe smoking was brought to the Thirteen Colonies by the first settlers; and they observed the Indians smoking pipes. The Indians had smoked tobacco in pipes for so many centuries that there is no evidence when they began. The primitive pipe in what is now southwestern United States seems to have been a hollow reed stem or a section of cane, later made of other materials in the form of a tube, probably straight. In North America, many forms of the Indian pipe have been found, varying from a straight tube to a curved one, to cones joined at the apexes, to bowl and stem joined at an angle, at a right angle, and even at an acute angle. Pipes were made by Indians from baked clay, wood, bone, metal, or stone, or a combination of these materials. Pipes, such as some of us now use, were originally shaped by Europeans.

In Great Britain only clay pipes were used until 1859, when the brier-root pipe appeared, made from the root of the white heath. The name is a perversion of the French name. This country has added to the variety the corncob pipe, now Missouri's famous product. The tube or double cone is an implement of great antiquity elsewhere than the American Continent, and was used upon occasion for smoking substances other than tobacco for the curative properties supposed to be in the smoke.

The cigar seems to have reached the white people of this country in a devious way. Columbus found the Indians smoking it, and it

seems to have come to this country by way of Spain and England. Quite similarly the domestic turkey, the potato, and some varieties of the bean, all originating somewhere in America, reached us through Europe. It is said that the first commercial cigars made in this country were made in the houses of the early tobacco growers in the Connecticut Valley and sold in New York and other towns. Cigar factories were established at East Windsor and Suffield, Conn., about 1810, and some of the tobacco used by them was from Cuba and Brazil. The cigars were peddled in wagons throughout the country. In 1825 a tobacco warehouse was erected at Warehouse Point, Conn., and cigar tobacco was packed there and shipped to New York in bales of about 100 pounds.

Since 1895 the Commissioner of Internal Revenue has ascertained and published the quantities of leaf tobacco used in this country in the manufacture of cigars, cigarettes, and "tobacco and snuff," the tobacco of the last class being chewing and smoking tobacco. After converting these three classes into percentages of the total leaf tobacco used by manufacturers, it appears that the fraction for cigars increased from 25 per cent in the calendar year 1896 to 30 per cent in 1907, when the advance was arrested. From 1908 to 1914 the percentage ranged from 27 to 29, and a rapid decline followed during the World War to 26.5 per cent in 1915 and 1916, and to 25 per cent in 1919. In 11 years the fraction of the leaf tobacco used for cigars declined from 30 to 25 per cent.

By the time that this country had recovered from the industrial depression of 1893-1897, the production and consumption of tobacco products had become fairly normal. The Commissioner of Internal Revenue reports that the average yearly number of large cigars made in 1899-1901 was about 5,500,000,000 and that the number had increased to the yearly average of 7,200,000,000 for 1916-1918, or 30 per cent. Corresponding figures for small cigars, including cheroots, are 669,500,000 made in the average of 1899-1901 and 900,100,000 in the average of 1916-1918, an increase of 35 per cent. Exports of cigars and cheroots reached the number of about 2,400,000 in the year ending with June, 1917, 15,000,000 in 1918, 33,000,000 in 1919, and 67,000,000 in 1920.

More than one-half of the leaf tobacco annually used by manufacturers during 1896-1918 became chewing and smoking tobacco and snuff, but the fraction has been a declining one. From about 70 per cent of the total in the earlier years, it fell to 61 per cent by 1915, followed by a rapid fall to 46 per cent in 1919, or less than one-half of the leaf tobacco used by manufacturers.

In weight, smoking tobacco by far leads every other product. For 1899-1901, the average was 105,400,000 pounds, and in 1918-19 the quantity had grown to 240,000,000 pounds, a gain of 128

per cent. Plug tobacco is next in weight below smoking tobacco, and averaged 170,700,000 pounds in 1899-1901 and 158,000,000 pounds in 1918-19.

Tobacco chewing seems to have been reserved to become a great national habit first and only in the United States. The chewing habit appears to have been very sparingly followed in any other country. Prof. McGuire, of Washington, says that there is some evidence that tobacco was chewed in Central America when first visited by Europeans. De Candolle ventures the statement that tobacco chewing was practiced by the Indians throughout the greater part of America. I can not help but doubt this statement. The Handbook of American Indians of the Bureau of American Ethnology does not mention tobacco chewing by Indians.

Sailors were the first white tobacco chewers. Tobacco history was made, not so much by the officers of the poop deck, who got their names into print, as by the unknown men in the forecabin. Although English sailors chewed tobacco in the ports of England, the chewing habit made no headway among the landsmen of that country, nor did it obtain a footing in any country save the Thirteen Colonies. In this country, the people were living in the midst of a great national habit, with which all had become so familiar that they were hardly conscious of its existence, when Dickens gave the country a great national jolt by reporting what he saw, in Martin Chuzzlewit. I have the impression that chewing has long been declining, especially so in recent years.

Snuff taking in the nose, as we already know, was a gentleman's habit in England early in the nineteenth century and, in declining degree, long after. From England it was brought to this country and flourished for many years. As far as I have been able to learn, the habit is all but extinct. I last saw a snuff box in use in western Massachusetts 35 years ago. When I came to Washington 30 years ago I heard the tale that a snuff box was maintained in the Senate Chamber for common use at public expense, but I have not verified the statement. A woman doing clerical work in one of the offices of Washington takes snuff in her nose, and this is the only instance within my knowledge.

Women have long used snuff in this country by "dipping," and the habit at one time permeated all social grades, but not all parts of the country. One end of a small stick of wood, say 3 inches long and about as thick as a lead pencil, was chewed until the fibers became separated from one another, and this brushlike end was dipped in snuff and held in the mouth between the teeth and the cheek. This was usually done at home and when free from observation by guests and strangers, but not always. About 25 years ago I saw a white

woman enter a railroad car at Woodstock, Va., with a snuff stick protruding from her mouth, and she sat in the car without removing it. She was probably from the adjacent mountains. In those mountains in 1920 I saw women with a snuff stick.

I have often inquired of men, and women, too, who have traveled much throughout the United States, or resided in various parts, whether they had seen or heard of snuff taking in the nose or of snuff dipping in recent years, and hardly a person whom I have questioned has been able to say that these uses of snuff have been seen or heard of.

The average production of 15,300,000 pounds of snuff, in 1899-1901, grew to 34,900,000 pounds as the average of 1916-1919, a gain of 127 per cent, a conspicuous fact for such a product. It is not exported.

What is done with this great quantity of snuff? For the purpose of this paper, I wrote to the secretary of the Tobacco Merchants' Association of the United States, and from him I have a long-sought explanation. He informs me that about 98 per cent of the snuff used in this country is used somewhat as chewing tobacco is used, and that the same results are obtained without the necessity of chewing it. This use of snuff is common among the negroes of Washington. The processing of tobacco in the manufacture of snuff eliminates much of its acidity and bitterness; therefore less sweetening is required to make it a pleasant, agreeable "chew." The smaller the quantity of sweetening in the tobacco, the less saliva is created and the less spitting necessary. "While it is difficult to estimate how much is used for snuffing," the secretary of the association writes, "we place it at less than 2 per cent, and would not be surprised if it were not more than 1 per cent."

The most outstanding fact in the tobacco industry is the production of small cigarettes. The average number made in 1899-1901 was 3,200,000,000, and a number that reaches a billion seems large; but in 1916-1918 the average production of small cigarettes was 35,800,000,000, a gain of more than 1,000 per cent in 17 years. In 1918 the number rose to 47,900,000,000, and in 1919 to 53,000,000,000. It is true that billions of these cigarettes were exported in the war years, the number for the year ending with June, 1917, being about 6,500,000,000; for 1918 about 9,100,000,000; for 1919 about 13,600,000,000; and for 1920 about 17,500,000,000. Still the number remaining for domestic consumption averaged about 28,400,000,000 per year in the four years, 1917-1920 and the consumption by the military and naval forces of the United States, wherever situated, is almost entirely treated as "domestic." In 1918, 34,500,000,000 cigarettes were consumed in this country; and in 1919 nearly 36,000,000,000.

The weight of leaf tobacco used for cigarettes has been known as far back as 1896. About that time 5 per cent of all leaf tobacco used by manufacturers was converted into cigarettes, but years of decline followed to only 3 per cent in 1905. Thereafter the upward movement was strong. It reached 4 per cent in 1908, 10 per cent in 1913, 20 per cent in 1917, and 30 per cent in 1919, or more than the leaf tobacco used for cigars. Within a very few years the cigar has been losing its vogue relatively and the little cigarette has been overwhelmingly advancing.

The cigarette started with the Indians and it was given to the Spaniards in the West Indies; it soon acquired much popularity among the Spaniards everywhere and this popularity has been held to this day. The early Indian cigarette was rolled in tobacco leaf, and in Mexico a dry corn husk was used by the Aztecs. I have bought corn-husk cigarettes from the Mexican Indian women who made them in New Mexico. Eventually the Spaniards used a paper covering, the rolling still being done by hand. The cigarette spread throughout Europe, with eventual popularity. It was comparatively a cheap smoke when taxes made tobacco costly; it was a short smoke under circumstances in which a pipe or cigar would have been impossible or a waste; and it fitted into temperaments and states of mind incompatible with the deliberation and serenity of a pipe or a cigar.

At the exposition of 1876 at Philadelphia a new machine was making cigarettes wrapped in paper, and doing the work rapidly and automatically. Soon thereafter the future of the cigarette radically changed, and it became the "coffin nail" of millions and hundreds of millions of devotees throughout the world. Demand for cigarettes was enormously increased by the World War, and evidence of this is not confined to the United States. It comes also from Great Britain and the Continent. In five years the consumption of cigarettes nearly doubled in Great Britain. As many as 4,920,000,000 cigarettes were sold in France in 1919, an increase of 31 per cent in six years.

TOBACCO DECEPTIONS.

In the early days of smoking in England, smoking tobacco was adulterated by the use of cheaper materials to increase its weight. My supposition is that this was the origin of the use of licorice, molasses, and other things found to-day in some smoking and some chewing tobacco. New smokers and new chewers learn to like them in combination with tobacco. These adulterants are mostly responsible for the offensive odor of pipes.

One of the deceptions of the tobacco manufacturer and of the dealer in this country is in the use of the word "Habana." Among the well-informed tobacco men a cigar made wholly of Cuban

tobacco is a "clear Habana," and one made of the Habana variety raised in the United States is called simply an "Habana." But many ignorant retailers and most of the public at large are deceived into believing that "Habana" tobacco is Cuban tobacco.

Another widespread deception has appeared in recent years, and that depends on the use of the word "Egyptian" in connection with cigarettes. In the first place there is no Egyptian tobacco. The plant is not raised in Egypt. But perhaps the use of the word may be defended by saying that the cigarettes were made in Egypt. It is true that Turkish tobacco is imported into Egypt and there made into cigarettes, some of which are exported. In a recent Egyptian foreign trade report it is observed that only about 3,000,000 pounds of tobacco were imported into that country in each of the years 1918 and 1919. About 244,000,000 cigarettes were exported to all countries in 1918 and 344,000,000 in 1919. These are minute numbers in cigarette consumption. The foreign trade report of the United States states that in 1918 only 875,000 cigarettes were imported from Egypt and in 1919 only 450,000. Young women could be mentioned, all cigarette smokers, each of whom would smoke one-thirtieth of these cigarettes in the regular performance of her daily "stunt." If the cigarettes imported into this country from England are all made in Egypt, still the imports would be only twice the very small record. So that is all of the truth that there is in the Egyptian cigarette in this country.

TOBACCO SIGNS.

The wooden figure of an Indian offering cigars was everywhere seen in front of retail tobacco shops in this country less than half a century ago. Tobacco-shop figures of Indians, negroes, Scotchmen, Dutchmen, and now and then a figure of Mr. Punch were everywhere in evidence, and then, presto, they had disappeared.

The origin of these figures is of some interest. When Sir Walter Raleigh had made pipe smoking popular in England, there was an enormous number of shops in London where tobacco was sold. It was sold by apothecaries very naturally, because it was a medicinal plant at that time. Grocers and chandlers in general sold it, and keepers of inns and alehouses. Buildings were not numbered in those days and businesses were known as being conducted at the sign of the Cat and the Fiddle, and so on, the object being sometimes a picture and again a wooden figure. The Black Boy was the first wooden figure used by a tobacco dealer, a figure previously and also subsequently used in other business. It is mentioned as a tobacco sign by Ben Jonson in *Bartholomew Fair* in 1614. It was known that negroes in the West Indies cultivated tobacco for the

English market. After a while, the wooden figure of an Indian appeared, resulting from the false belief that Indians produced export tobacco. This sign was readily adopted in this country because it was known that the whites learned to use tobacco from the Indians.

Other significant early tobacconists' signs were a figure of Sir Walter Raleigh, of the Virginian, the Three Tobacco Pipes, the Wooden Midshipman, the Jolly Sailor, a Scotchman holding a snuff-box—this derived from the fact that the Scotch at that time were famed as snuff takers and as snuff makers. The Dutch were great smokers and hence a Dutchman was for a long time a common figure. In the eighteenth century in England a frequent sign was three figures—a Scotchman, a Dutchman, and a sailor, explained by this rhyme:

We three are engaged in one cause,
I snuffs, I smokes, and I chaws.

You observe that the sailor was the chewer.

WOMEN AS TOBACCO USERS.

Something must be said concerning the use of tobacco by women. Indian women did not use tobacco—they seem to have had no power to restrain the spirits of evil; but white women have used tobacco from early times. Soon after Spanish men began to smoke, Spanish women smoked cigarettes with hardly an exception, in all grades of society. Among women of other continental European countries, pipe smoking has always been uncommon, and cigar smoking and snuff taking too.

In England, a few women smoked very soon after the introduction of tobacco. Tradition has it that Queen Elizabeth once smoked with unpleasant results when Sir Walter Raleigh offered her a pipe. In some parts of England there was general pipe smoking by women of "the humbler classes" in the seventeenth century, and this fact continued to Victorian days. It was not until the sixties of the nineteenth century that cigarette smoking began to creep into feminine circles in England, and since that time this habit has advanced slowly until the World War. This war caused an extraordinary spread of cigarette smoking among women in England. The newspapers are saying that they learned to smoke during the war and that they were able to buy cigarettes because so many of them became wage earners.

It is well known that cigarette smoking by women has long been common in many of the continental countries.

In the United States, too, women have their tobacco history. Some of them were pipe smokers in colonial times, and many of these seem

to have been of the humbler sort, as an Englishman would say. This habit seems now to be confined mostly to the southern Appalachians.

Cigar smoking never gained a foothold among women of this country, nor of any other country.

Snuff taking, by snuffing into the nose, was practiced by women in this country to some extent in snuff-taking days and, according to the extent of my information, mostly in the North Atlantic States. This habit seems to have become almost extinct among women.

Snuff dipping was long very prevalent in the South among white women of all social grades and among negro women. The small remnant of this habit that is left seems to be confined to the southern mountains. I have not found any one who lived or traveled in the South who has lately seen a snuff stick or heard of its recent use, even among the negroes, outside of the mountains. While, strictly speaking, this is not tobacco chewing, it is closely allied to it. I have been unable to learn of any real chewing of tobacco in this country by women at any time, nor in any other country. Yet there is to-day, certainly among negro women and possibly among some of the white women of the Appalachian Mountains, a habit derived from snuff dipping, and that is the holding in the cheek of a little snuff. Within my knowledge, this habit exists among the negro women of Washington.

In all but one of the various uses of tobacco, white women of this country and of Europe have participated in great or small degree and have recoiled or retreated until they have all but fully, if not fully, abandoned these uses. But everywhere they have been conquered or are in process of being conquered by King Cigarette.

Why has the cigarette been victorious over women? It is a fact that the cigarette is a toy smoke and is not the more formidable undertaking that a cigar or a pipe is. But this does not fully explain. A woman is usually a miserable coward in the presence of convention, and hence in modern times, at least, she began to smoke cigarettes in secret, or with companions under cover. It was known that women in Europe smoked cigarettes. Women in "the smart set" got a notion that it was "smart" and a little naughty to be known as daring to smoke cigarettes; and then followed imitation, not only in that social clique but outside. Imitation is the great propagator of habits and customs.

Neither sex can make itself repulsive to the other. That is forbidden by the nature of our being. Has the use of tobacco by women made them repulsive to men? Tobacco chewing seems to have been regarded as taboo without a trial. The snuff stick was never used in the presence of men, except in the mountains of the South by the "poor whites" and by the negroes. Although this custom flourished for a while under its various conditions, it has become almost extinct.

It certainly became less and less respectable, as times changed, and hence it became also more and more repulsive to the other sex.

Snuffing by women must always have been repulsive. I shall ever remember, as a childhood observation, an old woman living near my grandfather's farm whose nostrils and upper lip were covered and discolored with snuff.

Pipe smoking, it is reported, is spreading in London and in England among women who are not of "the humbler classes." Little of the custom remains in this country, and that little in the Appalachians. I doubt that any man, elsewhere, would like to see his wife, or sweetheart, or any woman, smoke a pipe. And yet circumstances alter cases. In one of my rambles in the Alleghany Mountains in West Virginia I was kept for a cold night in November at a log house in the wilderness. After supper the housewife proceeded with her work with the end of a snuff stick in her cheek. Her mother, a woman of 70 or more, took a blackened clay pipe from the mantel above the fireplace and was about to fill it with shag, when I offered her my bag of tobacco. This she accepted and we sat before the log fire and smoked together and exchanged information until 9 o'clock struck the end of the day. A pipe in the mouth of a woman of that age, at that place, and at that time, did not seem at all repulsive to me.

No man would want to see a woman walk along F Street smoking a cigar, nor a cigarette, either. He would not like to see her smoke a cigar anywhere. But he can become accustomed to the cigarette smoking of women, and has become accustomed to it in certain places and times. It seems to be a matter of repetition of experience to establish familiarity, especially in the younger years of a man's life. The cigarette, unlike the cigar and the pipe, can blend with the daintiness of woman, and it has not been repulsive to man to see her smoke according to the custom of the country and where he has always seen it smoked.

A conservative, like myself, does not want to see the custom established in his own home, and yet somewhere else he can see women smoking cigarettes and not feel any antipathy. It seems to be a matter of generality of custom and frequency of seeing it in practice. Horses that were at first disposed to jump the roadside fence at sight of an automobile eventually paid no attention to it, so I expect that women will continue to smoke cigarettes in this country, that more women will adopt the habit, and that the screen of secrecy, the little that is left, will continue to be removed. Perhaps it will be a vogue that will have its day and then be embalmed in history, and perhaps not. Women of Spanish descent have been smoking cigarettes for 400 years.